WIRE WHEELS COMING IN OVER HERE AGAIN?

Two Makers Planning to Use Them in This Country on Next Season's Cars.

CHIEFLY A BRITISH IDEA

At Present They Are Not Seen Much on the Continent—The Points for Them.

E. C. J. McShane, representing the Mercer company, returned not long ago from England with drawings and literature on wire wheels and it is likely that Mercer cars in 1913 will be equipped with this type of wheel. H. J. Edwards, who is head of the new Edwards Motor Company, which is to build a Knight engined automobile, has given indications since he got back from a foreign trip that the Edwards car would have this wheel too. These two cases form an indication of a trend toward wire wheel construction over here again.

British practice is strongly devoted to the wire wheel, but France and Germany, like this country, favor the artillery wood wheel. The reason for the English preference is chiefly that wood stock for automobile wheels is not commercially available. One engineer who saw comparative tests of wood and wire wheels made abroad said he believed the wood was shown to be weaker, certainly in part, because of the stock. Had the tests been made with wheels of American stock he thought they would not have suffered in comparison.

The case for the wire wheel against the wood as it appeals to a maker of the former type is set forth thus:

1. The large number of spokes (72 in our case) insures complete circularity. The twelve spokes of a wooden wheel tend to make the wheel into a twelve sided figure.

2. The load in the suspension wheel is carried by a great number of the spokes, while in the wood wheel practically only one spoke at a time takes the load.

3. By manipulating the design it is possible to give the strength in exactly the direction required. With a wood wheel this is impossible without increasing the width of the spokes and thereby the air resistance.

4. The suspension wheel being entirely made of steel is affected equally by changes of temperature. The wood wheel with its steel rim is affected unequally and is liable to damage; this is quite distinct from the shrinkage and contraction of wood with different degrees of humidity, which, of course, have no effect whatever on a wire wheel.

5. The wire wheel by employing thin material of high heat conductivity plays an important part in keeping the tires cool. This contributes largely to the increased tire economy of the Rudge-Whitworth detachable wire wheel, as borne out by the tests conducted by the Daimler Company, which show a reduction in the tire bill of about 40 per cent.

Bert Morley in a paper read before the Society of Automobile Engineers, after their visit abroad last year, says in comment: "The fact should not be overlooked that the foreign wheelwright has neither the wood nor the methods to form felloe stock that we Americans fortunately possess, nor the methods of making wheels. The foreign wood felloe is cut out of small pieces, and although these are carefully matched together they manifestly present a structural weakness from which the wheels made in this country from whole stock and under hydraulic pressure are free.

"Thus the American wood wheel furnishes the 'suspension' principle, which the foreign manufacturer can obtain only through the medium of the wire wheel. Paragraph 4 would seem to apply only to equable climates such as England enjoys. Several of our engineers expressed the belief that extremes of climate such as we have would tend to expand and contract the steel spokes to the breaking point. Paragraph 5 is most interesting. In connection therewith the following from reports from the Daimler Company are also presented as worthy of consideration:

"'While it has been quickly realized by the observant motor car owner that wire wheels make for greater strength and safety, and at the same time secure a considerable reduction of dead weight, their beneficial effect upon the life of tires is not so generally known, and we therefore trespass upon your space to record the results of certain experiments which have been carried out by our tire department in London. There careful data have been kept of all tire replacements and repairs, and the following figures show the mileage obtained on heavy covered cars from 100 non-skid 935 by 135 mm. covers, half of which were fitted to wire and half to wooden wheels: Total mileage obtained from fifty non-skid 935 by 135 mm. covers taken from wire wheels, 172,731 miles; average 3,454. Total mileage obtained from fifty non-skid 935 by 135 mm. covers taken from wood wheels, 102,524 miles; average 2,050. Average miles per cover, 3,454 on wire wheels. Average miles per cover 2,050 on artillery wheels. As the cars employed were practically identical and were run under exactly similar conditions the results are very instructive.'

"In considering these tests attention is invited to the peculiar conditions of London driving. Road regulations are to drive as fast as you can. The streets are very congested, and the idea seemed to be, 'Hurry, because there are a dozen wanting your space.' This necessitates extensive and frequent usage of the brakes. Under sudden braking strains, wire wheels have a radial action or 'give' that wood wheels do not afford. This 'give' is perceptible to the riders when the brakes are applied and also when speedily rounding corners.

"An interesting feature of both the wire and wood wheels abroad is the quick acting removing hub, making it possible to detach the wheel from the hub and replace with another. This to the English wheel is the equivalent of the demountable rim of the American car. In England the detachable wheel meets the situation, as the majority of cars are driven by chauffeurs, upon whom falls the labor of making the change. In this country the majority of owners drive their own cars and demade a tire and rim that are light, easily removed and replaced. The detachable wire wheel, although undoubtedly well suited for foreign needs, would not prove satisfactory here, where the demountable rim and quick detachable tire are better suited to the American requirements."

Elsewhere, as to the point of beauty, which is brought up hereafter, Mr. Morley says: "Any radical departure from conventional lines of design is apt to be opposed from the standpoint of appearance, but as we become accustomed to the change the original offence to the eye is forgotten, particularly if the modification results in added utility. Consequently, although at first the wire wheel looked odd to us, the impression was shortlived; before our departure we were admiring the beauties of some of the wheels produced by the Rudge-Whitworth Company and the Riley Cycle Company for splendid cars used by the English nobility.

"Although the wire wheel can very properly be relived of the charge of being unsightly, when clean and well polished, it is open to criticism on account of the difficulty of keeping it in that condition without undue labor. The construction of the wire wheel is such that it is a dirt gatherer, the network of cross wire spokes precluding rapid cleaning. Of course this feature is not so aggravated in Europe with its smooth old army roads, but when the mud and ruts of most of our roads are considered the element of dirt becomes an objectionable factor."

SPEED HURTS TRUCK TIRES.

The Fast Driver Is a Menace and a Big Expense Too.

"It makes no difference how well solid tires are made, or to what extremes the manufacturer goes to fortify them against the incessant knocks of road travel, they will not withstand the abuses of the speed maniac," says F. F. Phillips of the United States Tire Company. "Speeding is an evil that can result in but one thing—decreased tire mileage and increased tire expense. And the particularly exasperating feature of this is that it is a matter that cannot be regulated unless a driver obeys intructions and sends the truck along at a moderate pace. Reliable drivers do this, but there is always the other fellow, who as soon as he is out of sight of the boss, throws open the throttle and burns up the pavement. Such a man is decidedly expensive to the truck owner.

"Demonstration has proved that at an average speed of twelve miles an hour the life of a tire is about twice what it is at an average speed of twenty miles an hour. Still higher speeds reduce the life of the tire proportionately. Therefore it should not require any great amount of meditation to determine the effect of constant speeding upon an owner's tire bills.

"There are a great many conditions and abuses calculated to shorten the life of a solid tire, but of all these I have no hesitancy in placing speeding at the top of the list. Every manager of a motor service should insist upon strict observance of moderate speeds. Economical tire service cannot be got in any other way."

OUR CARS AT THE DURBAR.

Nearly 500 American Made Machines There, Is One Report.

At the durbar in Delhi American made automobiles got a great deal of advertisement by the action of various Indian governments in placing orders for such cars which were used in the ceremonies. One report has it that nearly 500 American made machines were there. One Madras firm alone, for the locanl government officials, sold ten such cars. Since the durbar celebration the market for American machines in India has increased further.

The Mitchell Company reports that there were present three of its cars of the big six type, which carried Prince Pindi Rawl Jehlm and his retinue from Kashmir. The district is mountainous and furnishes a good test of the power and durability of automobiles.

Two Point Ignition.

"The double distributer magneto gives increased power to the automobile and many of the leading manufacturers are adopting this type of ignition," says Charles F. Splitdorf. "A single spark calls for an approximate advance of 30 degrees at the maximum power developed. The actual advance is reduced 15 degrees, but owing to the twin sparks obtained and firing simultaneously the compressed charge is ignited quicker and from both sides of the cylinder, thus burning the charge better and also tending to expand it more completely.

"Fouling and short circuiting are eliminated to a greater extent, resulting in more power, with a smoother running motor and car."

PARKING CARS IN MIDDLE OF STREET

Novel Scheme Tried by City of Philadelphia in Handling Broad St. Traffic.

CURBS THUS LEFT CLEAR

"Safety Isles" Turned Over to Machines—Confusion Is Readily Avoided by Plan.

An experiment in traffic regulations being made by Philadelphia in the more congested section of the city has for its object the segregation of motor traffic from the slower going horse drawn vehicles. The traffic regulations apply to all sorts of vehicles, but particular attention is given to automobiles, so as to help pedestrians and also to have the cars get along more freely. The unique featuc is in the parking of waiting machines in the middle of Broad street, so as to leave the curb line clear to traffic.

The general plan as described in the current issue of *Motor* is given herewith: George D. Porter, Director of Public Safety, and his associates in the department have evolved the plan. The first experiment was made on Broad street south of City Hall. This is in the hotel and office building section. At this point the curb on both sides of the street was lined with autos waiting for the owners, leaving a narrow path for the regular traffic. The presence of a dray or heavy vehicle on the street impeded the progress of moving motor cars and congestion followed.

Broad street is 113 feet wide, with a roadway of about 75 feet. Through the centre of the street are a string of ornamental electric light poles and the space between the poles is known as the "safety isle." Under the new regulations automobiles use this safety isle as a parking place.

An automobile moving south on Broad street desiring to stop on the west side can do so and after discharging the passenger swings over into the centre of the street to park the machine. To pick up the passenger the car must swing into the line of northbound traffic on the east side to Chestnut street, the first cross street above, and then turn south on the west side to again take on the passenger. No machine is allowed to back out of the parking space reserves, but instead must always seek the line of traffic.

This experiment proved so satisfactory that it was extended to other congested sections. It took just two days, with an extra detail of police, to acquaint the general run of traffic with the new conditions. After that no more difficulty was experienced. Strangers coming into the section at once see the trend of things and take to the rules without confusion.

On Market street, which is also a wide thoroughfare and one widely used by motorists because of the wood block pavement, much difficulty was experienced by drivers of slow moving and heavy teams driving into the path of swiftly moving cars. These heavy teams had acquired a habit of turning into Market street, turning sharply around the corners and then obliquely across the street into the line of travel. Under the new order they must continue across the street before making the turn into the line of traffic, giving the motorist that much more time to avoid a possible collision.

Probably the most interesting effort at controlling automobile traffic was the method of control enforced in front of the Metropolitan Opera House on an evening in March. From 500 to 1,000 automobiles gather at the playhouse on a heavy night, and these heretofore were parked in the street in front of the theatre. Many used the side streets, but on almost any night a group of machines could be found parked in Broad street five and six deep in lines extending for an entire block.

The first attempt to park them under the new regulations was a marked improvement on the old methods and little confusion attended the entangling of the hundreds of machines on the ground. The Metropolitan is at Broad and Poplar streets, having entrances on both thoroughfares. Under the new rules all machines must park in the middle of Broad street, or what is known as the "safety isle" north of Poplar street, facing west. No automobiles are allowed to remain standing in front of the opera house, or at points south.

Motor cars moving north on Broad street make the crossover from the line of traffic on the east side to the west side where the Opera House is situated, and discharge passengers at the Broad street entrances. Having discharged passengers the car moves over into the line of traffic on the east side, and thence north to the parking place.

Cars coming south on Broad street, being in the line of traffic on the west side of the street, turn into Poplar street to the Poplar street entrance of the house to discharge passengers. By this means the car does not come in contact with the line of traffic on Broad street. Having discharged passengers, the car continues on to the next thoroughfare west of Broad street, and thence south and around into Broad street, joining the line of travel on the east side of the street northward to the parking places.

On top of the Opera House is built a large electric sign from which the number is flashed in full view of the line of parked cars, and which can be seen for several blocks. In loading passengers the line moving from the parking places to the Opera House again divides, those whose homeward trip is southward picking up passengers on the Broad street front, while those whose destination is in the opposite direction go to the Poplar street entrances. Any car moving to the entrance and finding that the passenger is not ready cannot linger so as to block traffic. The car then moves on, making the round trip in the line of traffic, taking up the accorded position in the parking places and rejoining the line when called.

NEW OVERLANDS.

Two Models for Business Purposes on the 59 Chassis.

The Willys-Overland Company of Toledo has brought out two new delivery wagons. Both are mounted on the Model 59 chassis. One is called Model 59 delivery special, and the other Model 59 delivery express. The former is equipped with a covered body and the latter with an open body. Each has a carrying capacity of 800 pounds.

The covered wagon has a floor length of 60 inches, the width of the body being 43 inches and the height 53 inches. It has a 30 horse-power motor and lists at $1,000. The open express is sold at $50 less. The length of the floor is 67 inches, width of floor 42 inches, height of sides 10 inches and width of side wings 6 inches.

CARING FOR CUSTOMERS.

Factory Aid to Retailers Is Important, Says John Dale.

"One mistake of some manufacturers has been that of not taking care properly of retail customers," says John G. Dale, of the Simplex Automobile Company. "Those who have made it a practice to build up and maintain a direct relation between factory and user are in the strongest position to-day.

"A service innovation which has been popular with our customers is that at any time they can consult our designers for suggestions and advice."

Toured World by Car; Now Export Manager.

Thomas O. Jones, who was one of the party of three in the Hupmobile that went round the world, got such a schooling in the ways of foreign trade on the way that he has become assistant export manager for the R-C-H Corporation, which sells the R-C-H car. The trip took more than a year and was undertaken chiefly to improve the export trade of the Hupmobile, which it succeeded in doing.

Truck as Circulating Advertisement.

A department store in Detroit is making use of a motor truck as a moving bulletin of special sales. Panels about two feet deep and the full length of the truck are attached to either side and the goods for sale are blazoned forth there on signs large enough to be read while the truck, a General Motors products, is running. They figure in that store that the advertising pays them for the cost of maintenance of the truck.

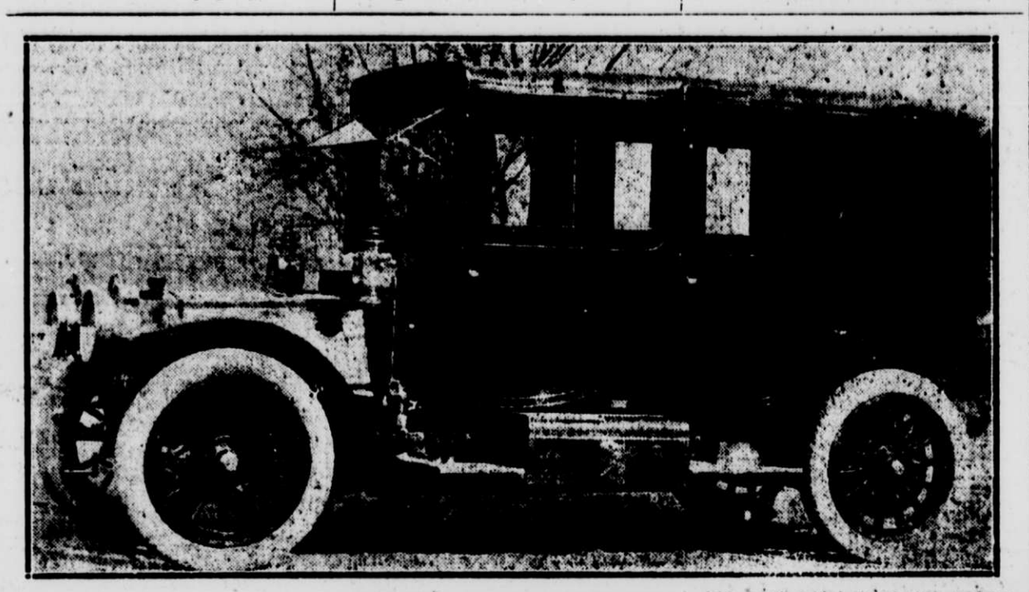
Students See Rambler Plant.

By way of a field excursion fifty students from the engineering department of Northwestern University went through the Rambler plant at Kenosha, Wis., not long ago. They examined the automatic machinery, asked questions about the transmission and the engine, talked with foremen and shop hands and altogether had a pretty satisfactory three hours in the plant.

AUTOMOBILE GIFT TO CARDINAL FARLEY

The automobile illustrated herewith might have been designated in earlier days "the Bishop's carriage." Now, however, it is the Cardinal's car. It is a 30 horse-power Panhard with Knight engine, with a special body of what is called the berline de voyage type. The car may be entirely open like a touring car, arranged like a demi-limousine or be used as illustrated, fully enclosed front and rear.

This car was given to Cardinal Farley by a friend whose name is withheld by request. It is understood the expense of keeping the car has been provided for also. For many years his priests, members of Catholic organizations and personal friends urged Cardinal Farley to accept automobiles which they were only too willing to give. Always up to this time he has refused to take such gifts because he believed an automobile to be too pretentious for a priest.



CARDINAL FARLEY'S NEW CAR.

RUNNING A MOTOR CAR ON A LIMITED INCOME

Some Figures That Do Not Represent the Cases in All Sections.

CAN BE DONE ON LITTLE

But Hardly on So Small a Sum as $25 a Month, Except in Peculiar Circumstances.

An article which comes to this paper from a Detroit motor car company deals with the subject of the expense of maintaining an automobile, with an idea of proving the thesis of the writer that families with incomes averaging from $2,000 to $2,500 can afford the modern motor car. "Had I written this article three or five years ago I would have wrtten it 'averaging $4,000 to $5,000,'" says he. "Since then, as with every great invention, there has been amazing progress."

The article assumes that the car, to cost between $1,000 and $2,000, is paid for out of the savings or inheritance of the buyer. It helps to show how hard it is to present average figures that will fit local conditions. Many folks will think the figures of cost are down pretty low. "The average car is used 4,000 miles a year—this including summer trips, week end trips, the trip to and from the office and evening jaunts," says the writer. That means only twenty miles a day for 200 days.

"That makes an average of about 333 miles a month," he continues. "For gasolene the cost is $3.75 a month, for approximately twenty-five gallons are necessary. Lubricating oil will cost about $1.60 a month. If he owns no garage of his own, $10 a month is the standard garage charge. Then comes the matter of tires. Most tires give about 5,000 miles service—some as high as 8,000 miles. Tire cost spread over a year will be about $12 a month. Allowing for puncture repairs $1, the cost is $13 a month. Often this cost will not exceed $10, but I am giving the outside figures. The reliable automobile dealers take care of adjustments on their cars.

"There you have approximately $25—adding up all figures—as maximum charge and when I state that figure I take into consideration the fact that the motor car is the most abused of all machinery."

Whatever section of this country these figures represent they can hardly apply to New York city. They estimate gasolene at 15 cents a gallon and an average of thirteen miles to the gallon. They represent a garage charge which is about half the average in New York city. The figures are not low, certainly, on the tire mileage. It is the general understanding that most tires do about 3,500 miles, rather than 5,000 miles, although of course there are exceptions.

As to the abuse the machinery must withstand there cannot be two ways of thinking about that. The writer adds very well: "A car well cared for can give lifetime service. Take the railroad locomotive. Every hundred miles it is carefully examined and oiled. At every two minute stop the engineer gets out with his oil can and lubricates the moving joints of the steed of the rail. The locomotive has an expert mechanician in constant attendance. It runs on rails that are like a level floor.

"Contrast this with the treatment of an automobile—with the roads it must encounter—you will quickly see that the modern motor car is a transportation masterpiece, for it performs with as much certainty in the layman's hands as does the locomotive controlled by an experienced man. Imagine, then, what the motor car in the hands of the layman who will endeavor to care for it can be capable of at very small expense. Care of a car is vital in determing its cost to the owner. In caring for the car naturally the first requisite is knowledge of the car.

"Makers of cars as a rule make provision for this by issuing books on the subject. Occasional scrutiny of these books—combined with the fact that the automobile has given many business men good mechanical knowledge—also has a tendency to give maximum life to the car. For fortified by knowledge thus gained a proper care of the car is comparatively easy. And properly cared for there is scarcely a limit to the period of service which a family may enjoy from a single automobile. That fact also enters into the addition of a modern motor car to a family's possessions."

However, it should be remembered that averages are ticklish things to handle and although it is certainly not an overpoweringly burdensome thing to run an automobile, costs vary as greatly as the makes of car and a monthly charge of $25 for all expenses of a car is, unless the machine is wonderfully economical, rather beyond the reasonable expectation.

BARRED FROM THE STREETS.

Horse Drawn Vehicles Soon Will Be, Says Goodyear Tire Man.

"It will be a matter of only a few years," says P. W. Litchfield, factory manager of the Goodyear Tire and Rubber Company, "until the use of horse drawn trucks in cities will be prohibited by law. Mr. Litchfield, in common with other observers of the development of the automobile business, predicts that the development of the motor truck in the next five years will be as great as the development of the pleasure type of car was in the past five years."

This year's automobile shows in the larger cities of the country, he cites as significant. Previous to two years ago there was no such thing as a real show of motor trucks. Now New York, Chicago and a number of other large cities have made excellent shows in heavy and light commercial cars. Next year's shows, according to all evidence now obtainable, will mark another big step forward in the direction of efficient transportation of heavy commodities in cities and elsewhere.

As in the development of the pleasure car, tires are having a great deal to do with the despatch or delay of the trucks development. The Goodyear Tire and Rubber Company was one of the first tire concerns in the country to prepare for the truck tire business that is now at hand.

STUDEBAKER HIGH RECORD.

March the Banner Production Month, With More Than $4,000,000 Worth.

Its own records for quantitative production were broken in March by the Studebaker Corporation, whose Detroit factories produced an almost equal number of E-M-F and Flanders cars. Their combined value was $4,276,000. Across the river, in Walkerville, Ont., the Studebaker Corporation of Canada had an output in the same month of $325,000. Had it not been for the car shortage, the Detroit output, it is figured, would have been $500,000 more.

The Studebaker plants also established a new record for one day's shipments, when on March 30, 374 new motor cars were loaded at the sidings and started on their way to the salesrooms of ninety-eight branches and dealers. It is expected that a greater total will be reached in April, as the factories are reported to be behindhand on orders in spite of the large amount produced.

FIRST IN UNDER N. J. LAW.

Connecticut Motorist Waited in Trenton for Bill to Be Signed.

Connecticut motorist No. 3444 figured as the first man in the country to take advantage of New Jersey reciprocity last Tuesday. He waited patiently all the afternoon in front of the State House at Trenton until Gov. Wilson, at exactly five o'clock, attached his signature to the ticket bill.

A handshake with the Governor, and the man from Connecticut scurried outside to his car, removed his New Jersey license and proceeded forthwith without hesitancy until he met the first policeman, to whom he successfully explained that non-resident motorists were now welcome in the Commonwealth.

Rush Work in Delivering Coal.

In order to be sure of coal in case a strike was declared the Hotel Belmont gave an urgent order recently to one company, which is equipped with Commer trucks. Starting early one Sunday morning the three trucks of 6½ tons capacity, delivered up to nightfall 376.1 tons, each truck making 11 round trips of 3 3-5 miles from the yards to the hotel and back. One of the trucks has been in service a year and a half, but did just as much as either of the two other more recent purchases.

New York-Savannah Highway.

"I note with satisfaction that the plan of a highway from Washington to Savannah is taking definite shape," says Ferdinand Ciniotti of the Pullman agency. "It was over this route that the Pullman forty led in a road contest from New York to Savannah several years ago. At that time the roads were in deplorable condition and headway was difficult."

Has Confidence in Havers Six.

"The Havers Six-44 is a newcomer to New York," says Albert L. Kull of the Havers-Imperial Auto Sales Company, "but I believe that the value in it at the price will be attractive to automobile buyers. We feel that it is a good six cylinder machine at a moderate price."

An Alco in Black and Gray for G. Carnegie.

George L. Carnegie of this city, a nephew of Andrew Carnegie, has bought a six cylinder 60 horse-power Alco touring car, finished in gray with a black stripe around the body. Mr. Carnegie returned not long ago from Europe and took the car after a demonstrating trip.

CHAUFFEURS WORK PRETTY LONG HOURS

Especially in the Winter Time They Are Almost Constantly Being Employed.

DRIVERS ARE ON DECREASE

Owners Now Handle Cars More Than They Used To, So Jobs Are Not Not So Many as They Were.

Being a chauffeur is a job that seems better to a great many young men before it is undertaken than it does afterward. At first blush to get anywhere from $20 to $30 a week for running an automobile seems like fairly good pay, because the work does not appear to be exhausting, and as it involves pleasant enough relations with one's employers and ordinarily an enjoyable summer, on the surface it has a great many features which are worth while. But it is in the winter time when the driver is apt to feel that the job could be a whole lot pleasanter and easier.

"Chauffeur's hours" are proverbial of much work. For instance, the man who is driving a town car or a closed car which is in general family use in the winter gets around about 8 o'clock in the morning, or maybe a little earlier, to the garage and looks over the machine, making ready to go down to the house at the usual time, which is somewhere between half past 8 and 9 o'clock. He takes the man of the family down to his office and then generally is under orders either to come back to the house to get some one of the women folks, or else if they have already ridden down town with him, he stays around in front of a shop or other such place until it is time to go home somewhere about noon.

If it is a matinee day he will be called into service very likely to drive to the theatre, and if it is not, there is probably some driving done in the middle of the afternoon after he has had a lunch, which owing to a not very great income, he is likely to eat in some cheap place. The afternoon's work is very apt to consist of driving in the park or further out, or else more waiting in front of stores. And then the chances are he will go all or part of the way downtown in order to get hold of the head of the family coming back from business. Some men have the cars come all the way down town, others ride up a distance on the subway and have their cars meet them at some one of the subway stations between Fourteenth and Forty-second streets.

When he gets the man home he is not unlikely to be ordered to call up after he has had his supper. Folks go out to the theatre frequently enough or they pay visits and as there is nothing easier to contract than the automobile habit, they get so that they are averse to going anywhere at all without making use of the car. Under such conditions the chauffeur is likely to be kept up pretty late. On a good many nights he will be up certainly as late as 12 o'clock and on exceptional occasions even later.

The upshot of it is that most of his days he does no less than twelve hours of work and it is not exceptional when he should be employed as many as sixteen hours a day. When the weather is unfavorable, snowy or cold, it makes it all the more unpleasant to have to stand around waiting for his people.

It need not be imagined that all chauffeurs have as much to do as this, although many of them do have. Still while they are working, the work is not so difficult or unpleasant. It is merely the length of time they may have to work each day which is unpleasant. Even when they are not doing anything they must be around the garage waiting for calls and they do not have a great deal of free time.

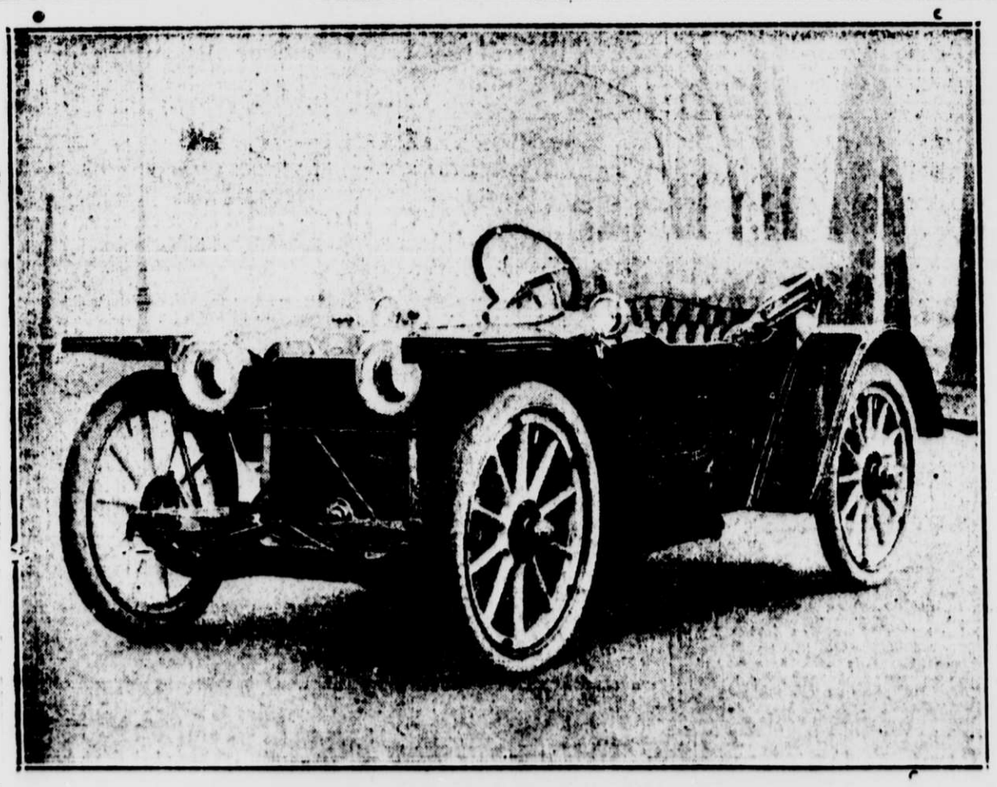
As to a day off there are differing customs. Some persons give the chauffeur one day in each week; others are in every fortnight and some others three times a month. There are others, however, who do not seem to think that the chauffeur ever requires a day off and he doesn't get it. To judge from the advertisements that appear in the daily papers and those devoted to automobiles, there are more chauffeurs looking for jobs than there are places open for them, so that apparently, in spite of all the discomforts, there is a demand for this sort of work.

However, that does not absolutely follow, because some of the overplus of chauffeurs is caused by the fact that a great many owners now drive their own cars and look after them where formerly this was a rarity.

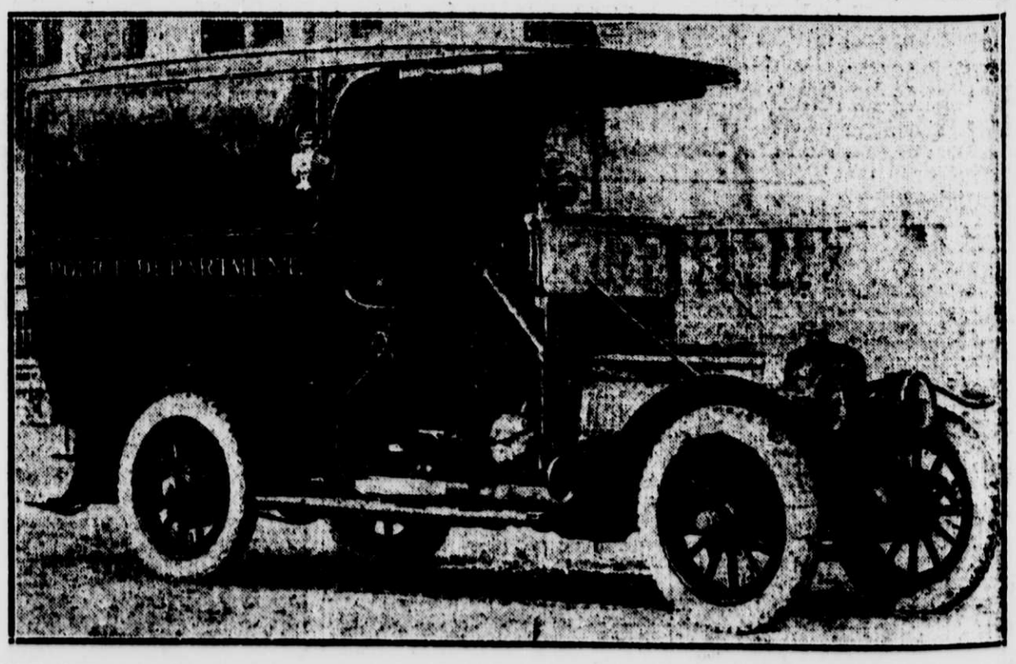
It will be remembered that not very long ago the police began to pick up chauffeurs who would not display their license badges, as the law demands. This was done at the suggestion of the State inspectors working for Secretary of State Lazansky, who suspected that a great many men must be driving cars without licenses, because the number of those applying for licenses had fallen off some thousands in 1911 from what they were in 1910.

His deduction was correct, although not based on an entirely correct premise. The decrease in the number of licensed chauffeurs has been primarily because there are less places open for them. So many more owners drive their cars than was the case in 1910 that the reason for the decrease is not far to seek.

The problem of the chauffeur, which was a big one is fast approaching a solution. Time was when the car owner knew little or nothing about an automobile and was entirely at the mercy of his hired driver. A good many of the chauffeurs do not know that the days of pillage have passed. They are only gradually coming to it. As fast as automobile knowledge increases among car owners just so fast do the chances for the chauffeur for graft recede.



AMERICAN SCOUT, AN UNDERSLUNG ROADSTER.



NEW MOTOR PATROL BUILT BY LOZIER MOTOR CO. FOR AUGUSTA, GA., POLICE DEPARTMENT. SEATS TEN PERSONS, EXCLUSIVE OF DRIVER AND ATTENDANT ON FRONT SEAT.